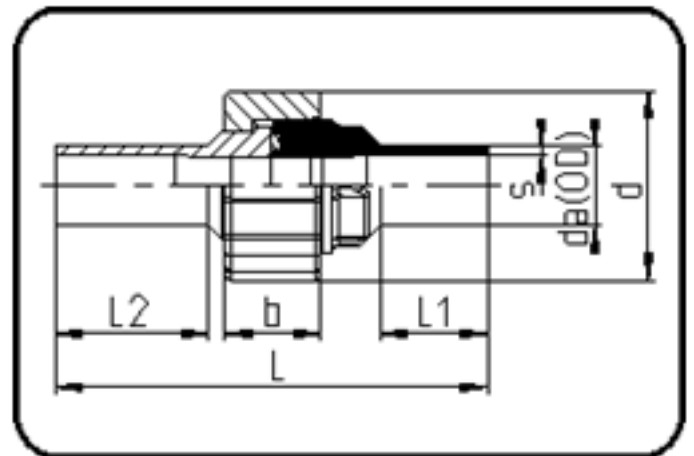
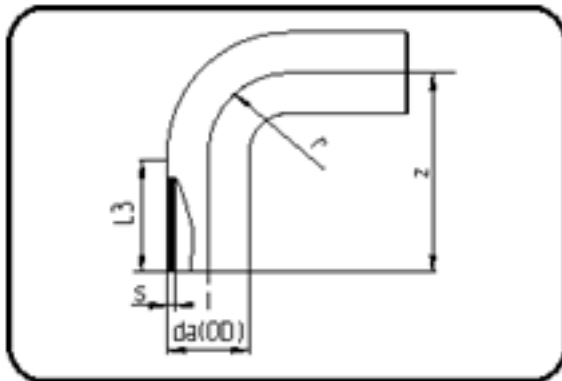
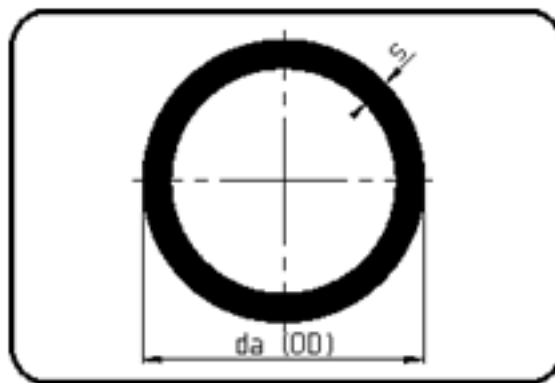


Dimensional Guide

Halar (E-CTFE)

Piping & Valves

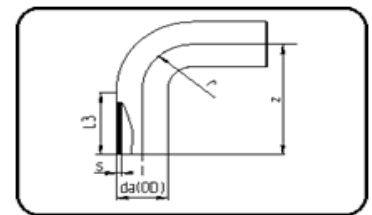
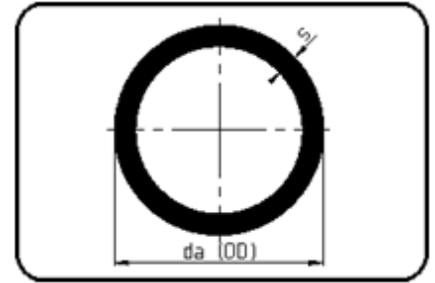


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Halar Dimensional Guide

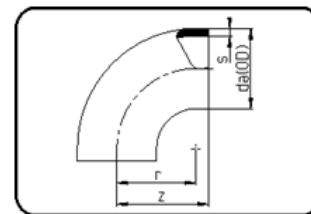
Pipe 5 meter-16.4' length

Nominal Dimension	Dimension da (mm)	Detail	da(OD)	s	Asahi part#
			in	in	
1/2"	20	SDR 21	0.79	0.07	5501005
3/4"	25	SDR 21	0.99	0.07	5501007
1"	32	SDR 21	1.26	0.09	5501010
1-1/2"	50	SDR 21	1.97	0.12	5501015
2"	63	SDR 21	2.48	0.12	5501020
3"	90	SDR 21	3.55	0.17	5501030
4"	110	SDR 21	4.33	0.21	5501040



Extended Leg 90 Elbow

Nominal Dimension	Dimension da (mm)	Detail	da(OD)	s	z	r	L3	Asahi Part#
			in	in	in	in	in	
1/2"	20	SDR 21	0.79	0.07	2.01	0.79	1.30	5503005
3/4"	25	SDR 21	0.99	0.07	2.20	0.99	1.30	5503007
1"	32	SDR 21	1.26	0.09	2.48	1.26	1.30	5503010
1-1/2"	50	SDR 21	1.97	0.12	3.31	1.97	1.42	5503015
2"	63	SDR 21	2.48	0.12	3.82	2.48	1.38	5503020
3"	90	SDR 21	3.55	0.17	4.84	3.55	1.34	5503030
4"	110	SDR 21	4.33	0.21	5.59	4.33	1.34	5503040



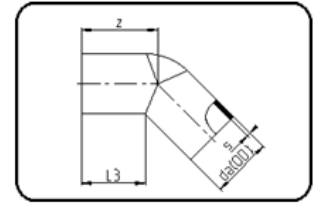
90 Elbow*

* short radius 90's being discontinued consult on availability

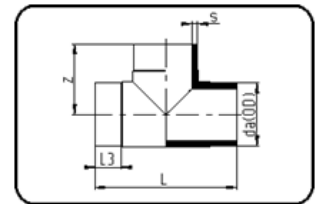
Nominal Dimension	Dimension da (mm)	Detail	da(OD)	s	z	r	Asahi Part#
			in	in	in	in	
1/2"	20	SDR 21	0.79	0.07	1.30	1.02	5504005
3/4"	No longer available- use extended leg 90						
1"	32	SDR 21	1.26	0.09	1.69	1.34	5504010
1-1/2"	50	SDR 21	1.97	0.12	2.32	1.97	5504015
2"	No longer available- use extended leg 90						
3"	90	SDR 21	3.55	0.17	4.06	3.59	5504030
4"	110	SDR 21	4.33	0.21	4.93	4.26	5504040

45 Elbow

Nominal Dimension	Dimension da (mm)	Detail	da(OD)	s	z	L3	Asahi Part#
			in	in	in	in	
1/2"	20	SDR 21	0.79	0.07	1.69	1.54	5516005
3/4"	25	SDR 21	0.99	0.07	1.77	1.58	5516007
1"	32	SDR 21	1.26	0.09	2.05	1.81	5516010
1-1/2"	50	SDR 21	1.97	0.12	2.60	2.21	5516015
2"	63	SDR 21	2.48	0.12	2.96	2.44	5516020
3"	90	SDR 21	3.55			2.75	5516030
4"	110	SDR 21	4.53			3.00	5516040

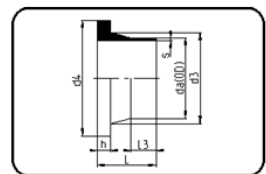


* 3" and 4" - 45's available as fabricated fittings-consult factory for dimensions and pressure rating



Tees

Nominal Dimension	Dimension da (mm)	Detail	da(OD)	s	z	L	L3	Asahi Part#
			in	in	in	in	in	
1/2"	20	SDR 21	0.79	0.07	1.38	2.76	0.59	5507005
3/4"	25	SDR 21	0.99	0.07	1.58	3.15	0.59	5507007
1"	32	SDR 21	1.26	0.09	1.77	3.51	0.67	5507010
1-1/2"	50	SDR 21	1.97	0.12	2.36	4.73	0.91	5507015
2"	63	SDR 21	2.48	0.12	2.96	5.87	1.10	5507020
3"	90	SDR 21	3.55	0.17	3.62	7.13	1.30	5507030
4"	110	SDR 21	4.33	0.21	4.33	8.79	1.30	5507040

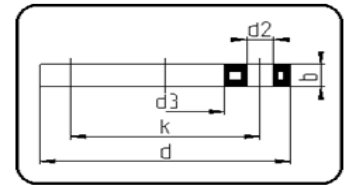


Stub End - DIN

DIN size is compatible with backing rings on next page
 * Requires Backing Ring- on next page

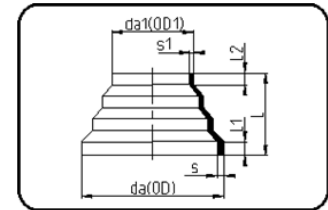
Nominal Dimension	Dimension da (mm)	Detail	da(OD)	s	L	L3	d3	d4	h	Asahi Part#
			in	in	in	in	in	in	in	
1/2"	20	SDR 21	0.79	0.07	1.97	1.22	1.06	1.77	0.24	5514005
3/4"	25	SDR 21	0.99	0.07	1.97	1.18	1.30	2.29	0.26	5514007
1"	32	SDR 21	1.26	0.09	1.97	1.02	1.58	2.68	0.28	5514010
1-1/2"	50	SDR 21	1.97	0.12	1.97	0.87	2.40	3.47	0.35	5514015
2"	63	SDR 21	2.48	0.12	1.97	0.71	2.96	4.02	0.39	5514020
3"	90	SDR 21	3.55	0.17	3.15	1.54	4.14	5.44	0.67	5514030
4"	110	SDR 21	4.33	0.21	3.15	1.50	4.93	6.23	0.47	5514040

Halar Dimensional Guide



Backing Ring ANSI 150-Steel Encapsulated in PP

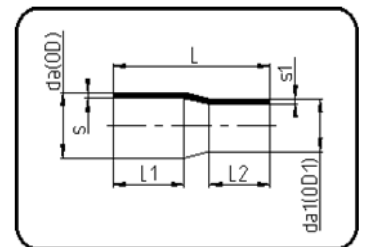
Nominal Dimension	Dimension da (mm)	Detail	da(OD)	d	d2	d3	b	k	Torque	Torque	Bolt	Asahi Part#
			in	in	in	in	in	in	Nm	in-lbs	Holes	
1/2"	20	16 bar	0.5	3.74	0.63	1.10	0.47	2.38	15	132.8	4	5046005
3/4"	25	16 bar	0.75	4.02	0.63	1.34	0.47	2.75	15	132.8	4	5046007
1"	32	16 bar	1	4.49	0.63	1.65	0.63	3.12	15	132.8	4	5046010
1-1/2"	50	16 bar	1.5	5.24	0.63	2.44	0.71	3.88	35	309.8	4	5046015
2"	63	16 bar	2	6.38	0.79	3.07	0.71	4.75	35	309.8	4	5046020
3"	90	16 bar	3	7.64	0.79	4.37	0.71	6.00	40	354.0	4	5046030
4"	110	16 bar	4	9.02	0.79	5.24	0.71	7.51	40	354.0	8	5046040



Stepped Concentric Reducer *Can be cut for intermediate sizes

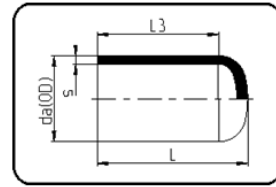
* Step reducers are being discontinued please consult on availability

Nominal Dimension	Dimension da/da1 OD mm	Detail	da(OD)	da1(OD1)	s	L	L1	L2	s1	Asahi Part#
			in	in	in	in	in	in	in	
2"x3/8"	63/16	SDR 21	2.48	0.63	0.12	2.21	0.35	0.20	0.07	5513247
4"x2"	110/63	SDR 21	4.33	2.48	0.21	2.56	0.43	0.28	0.12	5513420



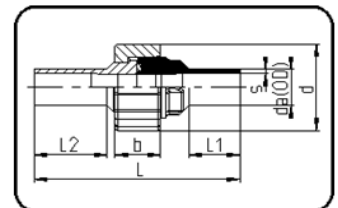
Extended Leg Reducer

Nominal Dimension	Dimension da/da1 OD mm	Detail	da(OD)	da1(OD1)	s	L	L1	L2	s1	Asahi Part#
			in	in	in	in	in	in	in	
3/4"x1/2"	25/20	SDR 21	0.99	0.79	0.07	3.35	1.54	1.58	0.07	5510101
1"x3/4"	32/25	SDR 21	1.26	0.99	0.09	3.74	1.73	1.58	0.07	5510131
1-1/2"x3/4"	50/25	SDR 21	1.97	0.99	0.18	4.65	2.17	1.73	0.09	5510210
1-1/2"x1"	50/32	SDR 21	1.97	1.26	0.18	4.65	2.32	1.81	0.12	5510211
2"x1"	63/32	SDR 21	2.48	1.26	0.23	5.36	2.52	1.93	0.12	5510249
2"x1-1/2"	63/50	SDR 21	2.48	1.97	0.23	5.91	2.60	2.32	0.18	5510251
4"x2"	110/63	SDR 21	4.33	2.48	0.26	7.09	3.27	2.48	0.15	5510420
4"x3"	110/90	SDR 21	4.33	3.55	0.26	7.09	3.27	2.96	0.21	5510427



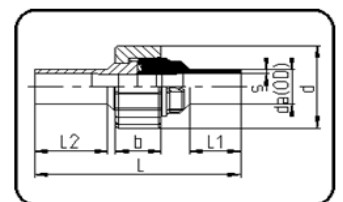
End Cap

Nominal Dimension	Dimension da (OD) mm	Detail	da(OD)	s	L	L3	Asahi Part#
			in	in	in	in	
1/2"	20	SDR 21	0.79	0.07	1.77	1.62	5543005
3/4"	25	SDR 21	0.99	0.07	1.93	1.62	5543007
1"	32	SDR 21	1.26	0.09	2.21	1.77	5543010
1-1/2"	50	SDR 21	1.97	0.12	2.88	2.36	5543015
2"	63	SDR 21	2.48	0.12	3.39	2.68	5543020



Union - FKM Rings - O-Rings FDA Approved

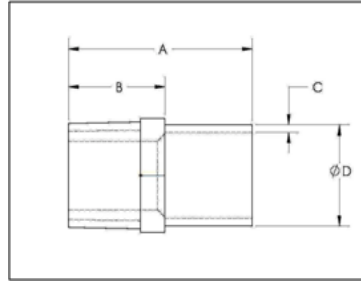
Nominal Dimension	Dimension da (OD) mm	Detail	da(OD)	s	L	L1	L2	d	b	Asahi Part#
			in	in	in	in	in	in	in	
1/2"	20	SDR 21	0.79	0.07	4.22	0.95	1.40	1.85	0.95	5533005
3/4"	25	SDR 21	0.99	0.07	4.41	0.95	1.44	2.25	1.02	5533007
1"	32	SDR 21	1.26	0.09	4.69	0.99	1.55	2.52	1.18	5533010



Union - Litharge Flourine Compound O-Rings - for high concentration (>97%) Sulfuric Acid use

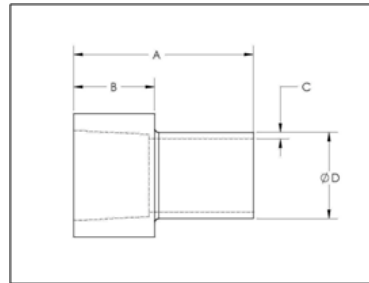
Nominal Dimension	Dimension da (OD) mm	Detail	da(OD)	s	L	L1	L2	d	b	Asahi Part#
			in	in	in	in	in	in	in	
1/2"	20	SDR 21	0.79	0.07	4.22	0.95	1.40	1.85	0.95	5534005
3/4"	25	SDR 21	0.99	0.07	4.41	0.95	1.44	2.25	1.02	5534007
1"	32	SDR 21	1.26	0.09	4.69	0.99	1.55	2.52	1.18	5534010

Halar Dimensional Guide



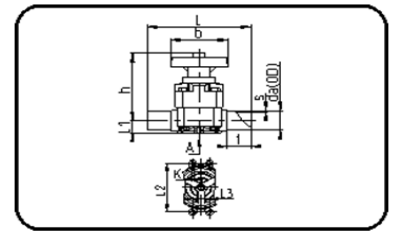
Male Adapter - Machined

Nominal Dimension	Dimension da (OD) mm	Dimension da (OD) in	A in	B in	C in	Asahi Part#
1/2"	20	.79"	2.35"	1.22"	0.07	5528005
3/4"	25	.99"	2.35"	1.29"	0.07	5528007
1"	32	1.26"	2.42"	1.29"	0.09	5528010
1-1/2"	50	1.97"	2.94"	1.6"	0.12	5528015
2"	63	2.48"	3.14"	1.74"	0.12	5528020



Female Adapter - Machined

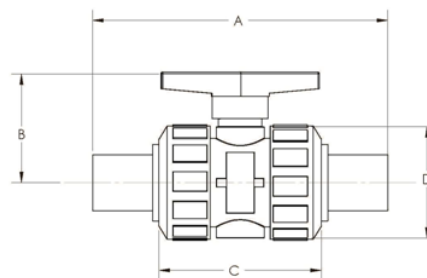
Nominal Dimension	Dimension da (OD) mm	Dimension da (OD) in	A in	B in	C in	Asahi Part#
1/2"	20	.79"	2"	.88"	0.07	5529005
3/4"	25	.99"	2"	1"	0.07	5529007
1"	32	1.26"	2.62"	1.18"	0.09	5529010
1-1/2"	50	1.97"	2.69"	1.3"	0.12	5529015
2"	63	2.48"	2.75"	1.36"	0.12	5529020



Manual Diaphragm Valves

* Air actuated options available, consult factory for details

Nominal Dimension	Dimension da (OD) mm	Detail	da(OD)	s	L	L1	L2	h	b	t	kv	Cv	Asahi Part#
			in	in	in	in	in	in	in	in	l/min	gpm	
1/2"	20	SDR 21	0.5	0.07	5.24	0.65	0.97	3.94	3.35	1.42	72	19.0	1440005
3/4"	25	SDR 21	0.75	0.07	5.67	0.67	0.97	3.94	3.35	1.42	93	24.6	1440007
1"	32	SDR 21	1	0.09	6.07	0.81	0.97	4.22	3.35	1.42	221	58.3	1440010
1-1/2"	50	SDR 21	1.5	0.12	7.64	1.26	1.73	5.67	5.32	1.81	500	132.0	1440015
2"	63	SDR 21	2	0.12	8.83	1.52	1.73	6.70	5.32	2.13	875	231.0	1440020



Manual Ball Valves

* Litharge-Flourine compound O-rings for aggressive media, i.e. Sulfuric Acid, other o-ring materials available.

Nominal Dimension	Pipe OD (mm)	A	B	C	D	Asahi Part#
1/2"	20	5.74"	1.85"	2.83"	1.97"	1441005
3/4"	25	6.40"	2.50"	3.54"	2.40"	1441007
1"	32	6.75"	2.75"	3.87"	2.80"	1441010

Ball valves available with air or electric actuation, contact Asahi for pricing

Ball valves should be drilled and deburred when used with Sodium Hypochlorite, to allow off gassing when in the closed position.

Halar Dimensional Guide

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INTERNET: <http://www.asahi-america.com> · Email: asahi@asahi-america.com

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Liability of the Seller under or in connection with this sale and/or the foregoing warranty shall be limited, at the sole option of the Seller, to one repair of, replacement of, or a refund of the purchase price of any products or part thereof (a), with respect to which Seller receives, promptly after Buyer’s discovery of any alleged defect and prior to the expiration of the one-year warranty period as provided above, notice from Buyer or Buyer’s claim defect and (b) which shall be returned to Seller by Buyer, as provided herein, promptly after Buyer’s discovery of such alleged defect and which shall be determined by the Seller to have proven defective within the one-year warranty period provided above; failure by Buyer to notify Seller and return such products to Seller after Buyer’s discovery of such alleged defect shall constitute a waiver by Buyer of any and all claims of any kind with respect thereto. Any products returned by Buyer to Seller under the foregoing terms shall be returned to Seller’s place of business freight prepaid, accompanied or preceded by Buyer’s particularized statement of the claimed defect. The risk of loss and freight charges to and from Seller in connection with any returned products shall be borne by Buyer; but Seller shall bear such additional freight charges arising in connection with any such returned products ultimately determined by Seller to be defective under the terms of the foregoing warranty, the cost of repair or replacement (if any) of such products, and the risk of loss or damage which such products are in Seller’s possession at its place of business. The foregoing remedy shall constitute the sole and exclusive remedy of the Buyer under or in connection with this sale and/or warranty of the Seller. Except as specifically provided herein, Seller shall not be responsible or liable for any costs, expenses or damages of Buyer in connection with any removal, repair or replacement (including any attempts or actions relating thereto) of any allegedly defective products, and no charge of setoff of any kind of Buyer relating thereto shall be made against the Seller without prior and specific written approval of Seller.

IN NO EVENT SHALL SELLER BE RESPONSIBLE OR LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING IN ANY WAY IN CONNECTION WITH ANY PRODUCTS OR THIS SALE.

The agreement of Seller to sell its products is expressly conditioned upon the Buyer’s assent to, and Seller agrees to sell its products only upon, all terms and conditions set forth above and on the face hereof. Buyer’s acceptance of any products provided under this sale shall constitute such assent.

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